

Work Order ID 79978

79978

Page 1

February-08-12 11:49:31 AM

Item ID: D2572 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Saddle, Fwd In 205
 Start Date: 08/02/2012 Start Qty: 12.00 *12* Cust Item ID:
 Required Date: 28/02/2012 Req'd Qty: 12.00 *12* Customer:
 Reference:

Approvals: Process Plan: M.L.J Date: 12/02/08 Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2572	Rev E

100 0.00

100 HAAS CNC VERTICAL MACHINING #1 RR 12.2.27 12

HAAS 1 Memo 0.00

HAAS CNC vertical machine #1

Program Batch No. 79978
 Double check by: RR
 1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets
 2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets
 3-Machine Step No 3 per Folio FA051 and insp

110 0.00

110 CONVENTIONAL MILLING MACHINE RR 12.2.27 12

Mill Conv Memo 0.00

Conventional Milling Machine Machine keyway as per dwg D2571 & D2572

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

79978

February-08-12 11:49:31 AM

N900040100

Setup Start *NS1*

Stop *NS2*

12

Cust Item ID:

12

Customer:

Reference:

Run Start *NR1*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop ***NR2***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120

QC

Memo

0.00

Quality Control

130

QC8- Inspect parts - second check

0.00

130

QC

Memo

0.00

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Memo

0.00

Hand Finishing

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 79978

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Page 3

February-08-12 11:49:31 AM

Item ID: D2572 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Saddle, Fwd In 205

Start Date: 08/02/2012 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 28/02/2012 Req'd Qty: 12.00 ***12*** Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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150	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
-----	--	------	--	--	--	--	--	--	--

150

Powdercoat

Powder Coating

Memo

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

12 = 50
 3200 F
 1:20

12x8 m / 12/02/28

160	QC3- Inspect Part Finish	0.00							
-----	--------------------------	------	--	--	--	--	--	--	--

160

QC

Quality Control

Memo

12x8 m / 12/02/28

170	Identify as per dwg & Stock Location:	0.00							
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170

Packaging

Packaging

Memo

432

12x8 m / 12-02-28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 79978

79978

Page 4

February-08-12 11:49:31 AM

Item ID: D2572 Accept *N9000040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Saddle, Fwd In 205
Start Date: 08/02/2012 Start Qty: 12.00 *12* Cust Item ID:
Required Date: 28/02/2012 Req'd Qty: 12.00 *12* Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							
Quality Control									

MLJ 12/02/28

ME
12-02-28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

February-08-12 11:49:36 AM

Page 1

Work Order ID: 79978

79978

Parent Item: D2572

D2572

Parent Item Name: Saddle, Fwd In 205

Start Date: 08/02/2012

Required Date: 28/02/2012

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP: 102.10.02Re-format; Change to Dwg Rev. D & incorporated
D2572KJ

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D6101-005

Manufactured

No

100

Each

12.0000

1

12

D6101-005

Saddle Billet

Location

Loc Qty

Loc Code

MAT041

8

71721

1

76838

7

MAT045

1

74507

1

MAT046

3

66966

3

79874

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 79978
Description: Saddle, Fwd Inboard		Part Number: D2572
Inspection Dwg: D2572 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2572 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.438	0.443		.441	.442	.442	.442		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		7.990	7.990	8.000	8.002		
F	0.490	0.510		.498	.496	.504	.506		
G	0.257	0.262		.257	.257	.257	.257		
H	0.375	0.380		.375	.375	.375	.375		
I	0.490	0.510		.501	.501	.501	.501		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.567	.567	.567	.567		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.874	3.874	3.874	3.874		
P	0.115	0.135		.124	.125	.128	.128		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.248	.248	.252	.252		
S	0.115	0.135		.126	.132	.130	.130		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.960	2.960	2.958	2.960		
V	0.230	0.250		.232	.232	.245	.245		
W	0.115	0.135		.124	.127	.127	.127		
X	0.307	0.312		.312	.312	.312	.312		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.362	.362	.362	.362		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.628	.621	.621	.621		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.245	.245	.245	.245		
AE	1.375	1.395		1.391	1.388	1.388	1.388		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.245	.245	.250	.250		
AI	2.000	2.020		2.006	2.006	2.006	2.006		
AJ	0.023	0.043							
Accept/Reject									

Measured by:	SL / 122
Date:	12-02-24

Audited by:	[Signature]
Date:	12-02-28

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	[Signature]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

BY

TO

DATE

ED COPY

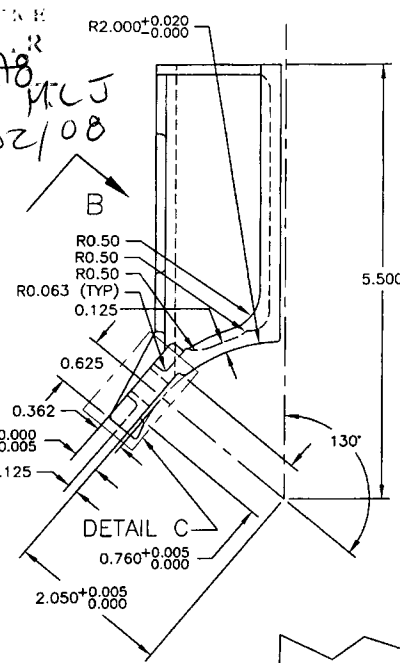
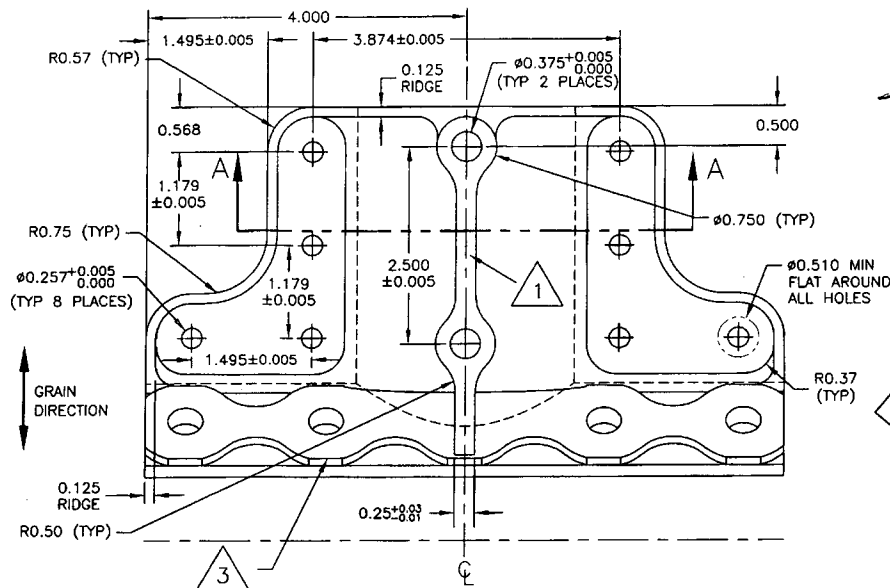
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DATE

RELEASED

05.12.06

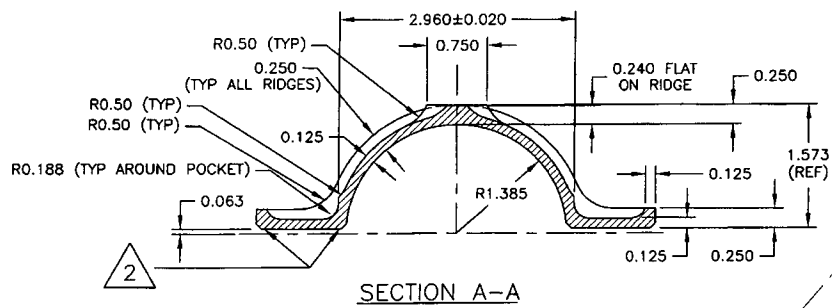
79978
MCLJ
12/02/08



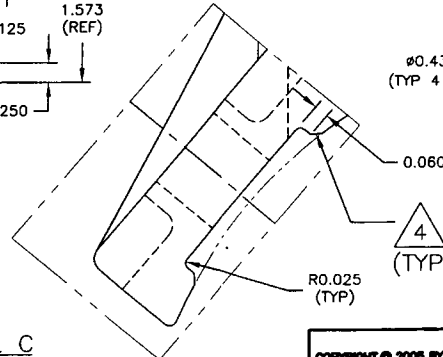
NOTES

MATERIAL: 7075-T7351 (QQ-A-250/12)
(REF DART SPEC. D6102-003)
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
- 2 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 3 CHAMFER 0.063 x 45° ALL AROUND
- 4 CHAMFER 0.033 x 45° (SEE DETAIL C) E

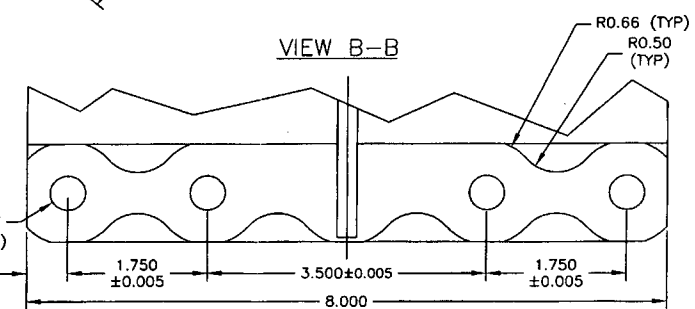


SECTION A-A



DETAIL C
SCALE 2:1

VIEW B-B



E	05.07.13	ADD CHAMFER ON RIDGE NOTE 4
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCORP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE

DESIGN DS		DRAWN BY PH		DART DART AEROSPACE LTD. HAMPSHIRE, ONTARIO, CANADA	
CHECKED		APPROVED		DRAWING NO. D2572	REV. E
DATE	05.07.13	TITLE	INNER FWD SADDLE	SHEET 1 OF 1	SCALE 2:3

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

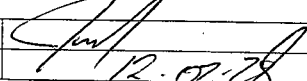
NOTE: Date & initial all entries

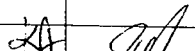
DART AEROSPACE LTD		Work Order: 74978
Description: Saddle, Fwd Inboard		Part Number: D2572
Inspection Dwg: D2572 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2572 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.438	0.443		.441	.441	.441	.441		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.002	8.002	8.002	8.002		
F	0.490	0.510		.506	.505	.502	.502		
G	0.257	0.262		.257	.257	.257	.257		
H	0.375	0.380		.375	.375	.375	.375		
I	0.490	0.510		.501	.501	.501	.501		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.567	.567	.567	.567		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
N	2.495	2.505		2.500	2.500	2.500	2.500		
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P	0.115	0.135		.128	.128	.128	.128		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.252	.252	.252	.252		
S	0.115	0.135		.130	.130	.130	.130		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
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W	0.115	0.135		.128	.128	.128	.128		
X	0.307	0.312		.312	.312	.312	.312		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.365	.365	.365	.365		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.623	.623	.623	.623		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.245	.245	.245	.245		
AE	1.375	1.395		1.388	1.388	1.388	1.388		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.250	.250	.250	.250		
AI	2.000	2.020		2.006	2.006	2.006	2.006		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	29
Date:	12.2.27

Audited by:	
Date:	12.02.28

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD		Work Order: 75978
Description: Saddle, Fwd Inboard		Part Number: D2572
Inspection Dwg: D2572 Rev. E		Page 1 of 1

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D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.002	8.002	8.002	8.002		
F	0.490	0.510		.505	.505	.505	.505		
G	0.257	0.262		.257	.257	.257	.257		
H	0.375	0.380		.375	.375	.375	.375		
I	0.490	0.510		.501	.501	.501	.501		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.567	.567	.567	.567		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.495	1.495	1.495		
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Q	0.115	0.135		.135	.135	.135	.135		
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T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
V	0.230	0.250		.245	.245	.245	.245		
W	0.115	0.135		.128	.128	.128	.128		
X	0.307	0.312	✓	.312	.312	.312	.312		
Y	0.760	0.765	✓	.760	.760	.760	.760		
Z	0.352	0.372		.365	.365	.365	.365		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.623	.623	.623	.623		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.245	.245	.245	.245		
AE	1.375	1.395		1.388	1.388	1.388	1.388		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.250	.250	.250	.250		
AI	2.000	2.020		2.006	2.006	2.006	2.006		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	120
Date:	12-2-27

Audited by:	[Signature]
Date:	12-02-29

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	[Signature]